IN THE CLAIMS

1. (Previously Presented) An electrode contact section incorporated in a semiconductor device, comprising:

a first-conductivity-type semiconductor substrate;

a second-conductivity-type impurity layer formed in one surface of the semiconductor substrate and having a thickness of more than 0.2 μm and not more than 1.0 μm from the one surface of the semiconductor substrate;

a second-conductivity-type contact layer formed in the impurity layer and having a thickness of not more than 0.2 μm from the one surface of the semiconductor substrate, the contact layer being thinner than the impurity layer and a peak of an impurity concentration of the contact layer being higher than that of the impurity layer;

a first electrode formed on the contact layer; and

a second electrode formed at another surface of the semiconductor substrate for allowing a current to flow between the first and second electrodes.

2. (Previously Presented) The electrode contact section according to claim 1, wherein:

the impurity layer is provided for carrier injection from the impurity layer to the semiconductor substrate, and

the contact layer is provided for reducing a contact resistance between the first electrode and the impurity layer and not for carrier injection.

3. (Canceled)

4. (Previously Presented) The electrode contact section according to claim 1, wherein the semiconductor device is an insulated gate bipolar transistor (IGBT).

5. (Original) The electrode contact section according to claim 1, wherein the impurity layer is formed in the entire one surface of the semiconductor substrate.

6. (Withdrawn) The electrode contact section according to claim 1, wherein the impurity layer is formed in a portion smaller than the entire one surface of the semiconductor substrate.

7-15 (Canceled)

16. (Previously Presented) A semiconductor device comprising:

a first-conductivity-type semiconductor substrate;

a second-conductivity-type base region formed in one surface of the semiconductor substrate;

a first-conductivity-type impurity region formed in the base region;

a first electrode connected to the first-conductivity-type impurity region;

a gate electrode connected to the base region via an insulation film;

a second-conductivity-type impurity region formed in another surface of the semiconductor substrate and having a thickness of more than 0.2 μm and not more than 1.0 μm from the another surface of the semiconductor substrate;

a second-conductivity-type contact region formed in the second-conductivity-type impurity region and having a thickness of not more than 0.2 μm from the another surface of the semiconductor substrate, the contact region being thinner than the second-conductivity-type impurity region and a peak of an impurity concentration of the second-conductivity-type contact region being higher than that of the second-conductivity-type impurity region; and

a second electrode formed on the contact region.

17. (Previously Presented) The semiconductor device according to claim 16, wherein:

the second-conductivity-type impurity region is provided for carrier injection from the second-conductivity-type impurity region to the semiconductor substrate, and

the contact region is provided for reducing a contact resistance between the second electrode and the second-conductivity-type impurity region and not for carrier injection.

18. (Previously Presented) The semiconductor device according to claim 16, wherein the second-conductivity-type impurity region is formed in the entire another surface of the semiconductor substrate.

19. (Withdrawn) The semiconductor device according to claim 16, wherein the impurity region is formed in a portion less than the entire another surface of the semiconductor substrate.

20-26 (Canceled)

27. (New) The electrode contact section according to claim 1, wherein:

said second-conductivity-type impurity layer has a thickness of about 1.0 μm from the one surface of the semiconductor substrate.

28. (New) The electrode contact section according to claim 1, wherein:

said second-conductivity-type contact layer has a thickness of about 0.2 μm from the one surface of the semiconductor substrate.

29. (New) The electrode contact section according to claim 1, wherein:

said second-conductivity-type impurity layer has a thickness of about 0.8 μm from the one surface of the semiconductor substrate.

30. (New) The electrode contact section according to claim 1, wherein:

said second-conductivity-type contact layer has a thickness of about 0.16 μm from the one surface of the semiconductor substrate.

31. (New) The electrode contact section according to claim 1, comprising:

a silicide layer formed between the first electrode and the contact layer.

32. (New) The electrode contact section according to claim 31, wherein:

said silicide layer has a thickness no more than said thickness of said contact layer.

33. (New) The electrode contact section according to claim 31, wherein:

the silicide layer has a contact-layer-side end thereof made to substantially correspond to that portion of the contact layer at which an impurity concentration profile of the contact layer assumes a peak value.

34. (New) The electrode contact section according to claim 31, wherein:

said silicide layer has a thickness less than said thickness of said contact layer.

35. (New) The electrode contact section according to claim 16, wherein:

said second-conductivity-type impurity layer has a thickness of about 1.0 μm from the one surface of the semiconductor substrate.

36. (New) The electrode contact section according to claim 16, wherein:

said second-conductivity-type contact layer has a thickness of about 0.2 μm from the one surface of the semiconductor substrate.

37. (New) The electrode contact section according to claim 16, wherein:

said second-conductivity-type impurity layer has a thickness of about 0.8 μm from the one surface of the semiconductor substrate.

38. (New) The electrode contact section according to claim 16, wherein:

said second-conductivity-type contact layer has a thickness of about 0.16 μm from the one surface of the semiconductor substrate.

39. (New) The electrode contact section according to claim 16, comprising:

a silicide layer formed between the first electrode and the contact layer.

40. (New) The electrode contact section according to claim 39, wherein:

said silicide layer has a thickness no more than said thickness of said contact layer.

41. (New) The electrode contact section according to claim 39, wherein:

the silicide layer has a contact-layer-side end thereof made to substantially correspond to that portion of the contact layer at which an impurity concentration profile of the contact layer assumes a peak value.

42. (New) The electrode contact section according to claim 39, wherein:

said silicide layer has a thickness less than said thickness of said contact layer.